

Meeting Minutes Transmittal/Approval
Unit Manager's Meeting: Remedial Action and Waste Disposal Unit/Source Operable Unit
Washington State Department of Ecology, Room 5, Kennewick, Washington
May 8, 1996

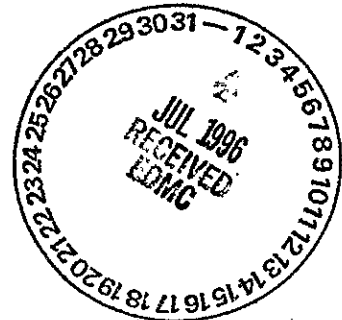
FROM/APPROVAL:  Date 6/6/96
Bryan Foley, 200 Area Unit Manager, RL (H0-12)

APPROVAL:  Date 6/6/96
Jack Donnelly, 200 Area Unit Managers Ecology (B5-18)


APPROVAL:  Date 6/6/96
Paul Beaver, 200 Area Aggregate Area Unit Managers, EPA (B5-01)

Meeting Minutes are attached. Minutes are comprised of the following:

- | | | |
|---------------|---|---|
| Attachment #1 | - | Agenda |
| Attachment #2 | - | Meeting Summary and Handouts |
| Attachment #3 | - | 200 Areas Strategy Meeting Grid |
| Attachment #4 | - | 200 Areas Source Operable Unit Strategy Action Item List |
| Attachment #5 | - | 200 Areas Source Operable Unit Strategy Parking Lot Items |



Prepared by:  Date 6/4/96
Greg B. Mitchem, ERC (H0-17)

Concurrence by:  Date 6/4/96
Vern Dronen/Greg B. Mitchem, BHI Remedial Action and Waste Disposal Project (H0-17)

**AGENDA - 200 AREA STRATEGY WORKSHOP
MAY 8, 1996**

1. Introduction
 - What's New
 - Review Agenda
 - Business; Minutes Signoff, Time Constraints, Planned Interruptions
2. Review Action Item List and Parking Lot List
3. Generic Approaches
4. Results of Subteam Work on Work Plans, Groupings, etc.
 - 1 - Discuss 4 Work Plan Options
 - 2 - Detail Recommended Option
 - 3 - Discuss Flowchart
5. RCRA/CERCLA Integration Discussion
6. Discuss Level of Characterization
7. Parking Lot
8. Wrap-up
 - Strategy Document Text, Schedule
 - Next Meeting
 - Partnering Vote
 - Summarize Action Items

**200 Area Source Operable Units Strategy Workshop
Meeting Notes
May 8, 1996**

1.0 INTRODUCTION

The meeting started at 8:15 a.m. in the large conference room at the Washington State Department of Ecology (Ecology). The meeting was a continuation of the 200 Areas Strategy meeting held on April 18, 1996, to address streamlining the implementation process and prioritization of activities.

1.1 WHAT'S NEW

- Joan Woolard reassigned to Regulatory function with continuing involvement with 200 Area Source work and Greg Mitchem replaces her as project manager. Transition to be complete by May 22, 1996.
- No news from or into the Hanford Advisory Board (HAB) on 200 Areas Source work.
- At Ecology's all-staff meeting last week, 200 Source Area topics were discussed.
- Norm Hepner is joining Ecology's team for 200 Source Area activities. He has previously worked on preparing the 200-BP-11 work plan and associated *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) negotiation.
- The HAB attaches great importance to groundwater remediation; 300 to 500-year governmental control of the site is being discussed, but has not been endorsed by HAB.

Today's Agenda Review

Statused and accepted.

Previous Minutes Review/Signoff

The April 10, 1996, meeting minutes were approved and the April 18, 1996, minutes were not completely approved.

2.0 REVIEW ACTION ITEM LIST AND PARKING LOT LIST

2.1 ACTION ITEM STATUS LIST (SEE HANDOUT)

- The Action Item List was covered in detail. In the future, the action item list will only be covered by exception (i.e., only if there is a change to be noted).
- Re: Tour Action Item #4 - B/C Cribs versus B/C Controlled Area - The U.S. Department of Energy (DOE), Richland Operations Office will look into the difference and report.
- Re: General Action Item #1 - Public Involvement before finalizing the 200 Areas Strategy - DOE has committed to consultations with the Indian Tribes using the Strategy's working draft. General agreement on the need for a united front in dealing with public involvement. Strategy may not be presented at a public meeting. After continued discussion it was agreed that the scale of "public" presentation will be established after the draft strategy document has been prepared.
- Re: Primary versus Secondary status of the Strategy Document - Added to Action Item List.
- Re: Analytical Strategy - Is this to be covered in the Strategy or Technical Document? - DOE indicated that an Analytical Strategy has been developed for work in both the 100 and 300 Areas and used to good effect. There was general agreement that the 100 Areas document, with lessons learned, would be reviewed to indicate where we go from here (copy handed out in meeting).

2.2 PARKING LOT STATUS LIST (see handout)

- Parking Lot Status List was covered in detail.
- Parking Lot Item #6 - Put remedial alternatives section in Strategy Document? - DOE suggested that this was already in the strategy outline and recommended closing out the item. This was accepted by the team.
- Parking Lot Item #9 - New Item added from the May 2 Subgroup meeting - What is the scope of the Technical Document? How much data evaluation is needed and what is the split between information in the Technical Document and the follow-on work plans?
- Parking Lot Item #10 - New Item added from the May 2 meeting - What is the difference between Interim Actions versus Final Actions? - All actions are interim until a final Record of Decision (ROD) is written. The item was deleted by general agreement.

- Parking Lot Item #11 - New Item from the May 2 meeting - Level of Risk Assessment and Characterization - On agenda for this meeting. Meeting to cover Parking Lot Items 2, 5, and 11.

3.0 GENERIC APPROACHES

At the request of DOE, Kevin Kytola, Project Performance Corporation, a subcontractor to DOE/HQ, presented on generic remedial strategy approaches being used elsewhere in DOE. The process uses experiences and agreements reached elsewhere in the DOE complex to serve as the basis and justification for subsequent responses at similar sites (see handout for details). Available techniques are as follows: (1) Plug-in Approaches, (2) Presumptive Remedies, and (3) Contingent Removal Actions. Examples at the Brookhaven National Laboratory's low-level waste landfill of presumptive remedy use and the 100 Areas' use of Plug-in Approaches were discussed.

Following the presentation and question and answer session, the team's thoughts were captured.

Generic Approaches - Group Thoughts

- Hard to leap from other sites to the Hanford Site (nonrad to rad sites).
- The Presumptive Remedy may be used, as appropriate, once the work begins.
- The Barrier Focused Feasibility Study sets the stage for Presumptive Remedy (need a couple decisions to apply this).
- When the flowchart identifies where generic approaches can be applied.
- Can fit in at the subgroup level and once we understand what we have at subgroup level.
- More upfront to get knowledge, then apply.
- Characterize assuming Presumptive Remedy applies, but have DO-LOOP to get more data if more data are needed.
- Sufficient data are not there for conceptual model, so Presumptive Remedy is too early.
- What are the characterization needs if use Presumptive Remedy versus characterization needs if full range of alternatives considered? What would be more/less/difference.
- Focus on subgroups/groups and tie to characterization needs if Presumptive Remedy exists for these groups.
- 200 N could link (Presumptive Remedy) with 100 Area decisions?

- Septic Systems and Burn Pits are possible for contingent removal actions, as well as construction debris sites.
- Focus on sites that we plan on doing work on in the near future (septic tanks being used for the next 10 years).

Action Items resulting from the discussion: (1) Kevin Kytola to provide to team information on applicability of solid waste disposal facility approaches to DOE burial grounds and (2) Joan Woolard to provide to team additional response guidance received from Kevin Kytola.

Incorporating the Generic Approach into the Strategy Document was discussed, and the following items were agreed to in a consensus vote.

General Approach - Strategy Document

- General description of generic approach.
- Discuss linkage with level of characterization (see thoughts for words).
- Consider these things.
- Show where in the flowchart these can apply (evaluate in technical document stage) and then show in the work plan in more detail and in subsequent steps, if opportunity is identified.
- Discuss the known potential efficiencies that have narrowed alternatives down before characterization (e.g., 100 Areas).

Partnering

A DOE proposal to host a moderator-led partnering workshop was discussed and the offer was declined.

4.0 RESULTS OF SUBTEAM WORK ON WORK PLANS, GROUPINGS, ETC.

Paul Beaver and Suzanne Dahl discussed the results of a meeting held on May 2, 1996, and presented a summary of four options to generate an appropriate series of documents to organize and direct field activities (see handout for details). The primary differences related to the number of work plans required and whether a Technical Document is required to define the groupings and subgroupings of waste sites. The current Tri-Party Agreement plans require preparation of 42 work plans, one to address each operable unit in the 200 Areas, including four groundwater and four single- and double-shell tank OUs. Option 1 required 9± work plans and would not require a Technical Document. Option 2 required 3 work plans: one for 200 East and one for 200 West sites, plus a work plan for the burial grounds. Option 3 would require only 1 work plan for all 200

Areas with representative sites developed in the Technical Document. Option 4 used an approach similar to the *Aggregate Area Management Study Report* (AAMSR) by recommending a total of 6 work plans, one for each of the major processing plants (PUREX, B Plant, T Plant, S Plant, U Plant, and Z Plant).

Option 2 was favored by the subgroup and discussed in detail, although Option 4 was recognized as having many of the same favorable characteristics. After some discussion, Options 1 and 3 were dropped by consensus vote.

The logic of documents required to initiate field work and reach final closure on site remediation, under Option 2 (see 200 Area Implementation Flowchart Handout), consists of the Strategy Document, a Technical Document, three Work Plans (200 East, 200 West, and Burial Grounds) and Descriptions of Work (DOW) for each subgrouping of waste streams. The Technical Document would be used to logically group like waste streams/sites into subgroups, present the needed justification, and establish the analogous sites for the subgroup. Work plans would implement the Strategy Document's process with the Technical Document's groupings. Work plans that have been relatively large documents will be reduced in size by referencing prior work (such as the AAMSRs), where possible. Work plans will also provide general sampling/analysis guidance to implement characterization activities. Field activities would be directed by the DOWs generated for each subgroup, and would be subject to regulatory approval. Reports of Representative Site Characterization (remedial investigation/RCRA field investigation [RI/RFI]) would be generated next for the group or groups of sites investigated. Where needed for quick response, an Action Memorandum could be issued following an EE/CA. The next steps of the focused feasibility and corrective measure studies, proposed plans, and RODs would encompass as many sites as possible leading to the Remedial Design/Remedial Action (RD/RA) Work Plan.

A branch of the flowchart provides for a focus package, ROD/Explanation of Significant Difference (ESD), and characterization feeding into the RD/RA Work Plan for those sites not addressed as part of the primary path. Another branch of the logic provided the option for development of verification/design sampling in parallel with the proposed plan and ROD development to support the RD/RA.

Following this discussion, the following factors were generated by the team regarding concerns/factors related to choosing between Options 2 and 4.

Options

The following group concerns were identified and agreed to as a consensus item:

Flowchart Additions/Changes

- Add ERA path and DOW box.
- Discuss "base case."
- Discuss briefly key examples of built-in flexibility.

Options Evaluation Factors

- Get to remediation quicker.
- Support single regulator concept.
- Support use of analogous site approach.
- Factor in geographic area/interferences.
- Promote public understanding/buy-in.
- Minimize duplication of effort.
- Maintain manageable size and organization (planning) - not too big and not too little.
- Supports concurrent multiple treatability tests.
- Support cumulative effects issues.
- Supports use of generic approaches.
- Maximum use of work performed.
- Show how this will maximize integration (holistic approach) with other programs.

Option 2 was chosen by consensus because it provides a better use of the analogous site approach and provides a better public understanding of the 200 Area Source activities.

5.0 REGULATORY ISSUES

A break was taken in the work plan subgroup's discussion to review developments on regulatory activities.

5.1 WASTE SITE RECLASSIFICATION STRATEGY

Linda Mihalik discussed an approach being developed to reclassify sites, whether an existing Tri-Party Agreement/*National Priorities List* or a newly discovered site. When a site is determined not to have had a spill/release or where the site has been cleaned up under a housekeeping activity, a delisting process in the Tri-Party Agreement Handbook can identify these sites and provide an acceptable means of dropping them from the ESD. A site's delisting will require regulator approval. This proposal has been generally agreed to by the Tri-Party Agreement members and is being circulated for final signature approval.

The following team decisions were developed and accepted:

Waste Site Reclassification

Incorporate waste site reclassification process in strategy document as item brought forward from 100 Area lessons learned for the review of sites for hazardous constituents and performing voluntary actions, as appropriate.

Waste site reclassification will be addressed as an overall upgrade in 200 Area work and will be mentioned as a program that is already an ongoing effort, and text in the Strategy Document will identify the reclassification process.

5.2 RCRA/CERCLA INTEGRATION

Linda Mihalik and Moses Jaraysi have discussed this topic. Revisions have occurred, but need further review in a future meeting between Linda and Moses (Action Item).

6.0 LEVEL OF CHARACTERIZATION

Due to limited time, the level of characterization issue was not discussed in detail. However, a few thoughts of what needs to be captured in future meetings were discussed.

Level of Characterization

- How each document fits into the characterization process.
- Work plan
 - Broad number of boreholes, testpits, etc.
 - Why doing
 - What data exists
 - DQO.
- Technical document
- DOW
 - Site-specific Sampling and Analysis Plan.

A group decision was made to create a subgroup to work through the details of the Level of Characterization issues. This group will consist of Joan Bartz, Paul Beaver, Suzanne Dahl, and Bryan Foley. A meeting of this subgroup was scheduled for May 15, 1996, at Ecology. A second subgroup was established to address the details of prioritization. The group will meet on May 13, 1996, at 1:00 p.m. (site to be determined) and will include Paul Beaver, Jack Donnelly, Bryan Foley, and Moses Jaraysi.

The next team meeting will be held on May 15, 1996, at the Ecology building at 1:00 p.m.

The agenda will include the following:

- Level of Characterization
- Analytical Strategy
- Priorities
- Parking Lot Items
- Technologies

- Strategy Document
- Contents of Flowcharts.

Action Items

- Pros/cons on strategy versus "old way," brainstorm today.
- Norm Hepner on distribution list - Part of Team.
- Create a project schedule for 200 strategy through September and discuss forecast thoughts for next year.
- Get applicability of landfill Presumptive Remedy to DOE burial grounds.
- Copy of phased response guidance.
- Moses/Linda to talk on *Resource Conservation and Recovery Act of 1976 (RCRA)/Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)* integration.

Generic Approaches

“remedial strategies which use the knowledge gained from previous waste site remediation experience to serve as the basis and justification for subsequent responses at similar sites”

Goal

- The goal of generic approaches is to provide the core team with effective tools to streamline decision making such that defensible decision are reached efficiently and effectively.
- Specific objectives include:
 - » Communication of established streamlining approaches
 - » Definition of how to apply established approaches
 - » Support of decision makers in the development of site-specific streamlined approaches

Available Options

- Plug-in Approaches

- » remedial strategy where site profiles are matched to the profiles for remedial alternatives previously selected at similar sites

- Presumptive Remedies

- » preferred technologies for common categories of sites, based on historical patterns of remedy selection and EPA's scientific and engineering evaluation of performance data on technology implementation

- Contingent Removal Actions

- » standardized, pre-approved response actions for expected site problems

Plug-in Approaches

- Established Plug-in Approaches
 - » Indian Bend Wash Superfund Site
 - » Savannah River Site Approved Standardized Corrective Action Design (ASCAD)
 - » Hanford Site 100 Area Source Operable Units
 - » U.S. Air Force Presumptive Remedy Engineering Evaluation/Cost Analysis (PREECA) Report.

Plug-in Approaches (cont)

- Use of Existing Plug-in Documents
 - » Assemble Core Team
 - » Develop Site Conceptual Model
 - » Identify threats posed by site (site problems)
 - » Identify conditions/characteristics warranting action (site profile)
 - » Identify conditions/characteristics addressed by plug-in response actions (remedy profile)
 - » If the conditions/characteristics are compatible, then plug site into existing documentation (compatibility determination is an iterative process that may be supported by limited data collection)

Plug-in Approaches (cont)

- Develop New Plug-in Document
 - » Assemble Core Team
 - » Develop Site Conceptual Model
 - » Identify threats posed by site (site problems)
 - » Identify conditions/characteristics warranting action (site profile)
 - » Group waste sites with similar condition/characteristics which warrant similar response actions
 - » Identify conditions/characteristics addressed by the plug-in response action (remedy profile)
 - » Develop plug-in documentation which matches waste site group profiles to remedy profiles

Plug-in Approaches (cont)

- Example DOE Application

- » Hanford Site 100 Area Source Operable Units

- Waste sites were grouped (analogous facilities)
 - Representative waste site profiles were developed for each group
 - Alternate response actions were analyzed for the group profiles
 - Preferred alternatives were selected for each waste site group
 - Future sites with profiles compatible with group profiles will “plug-in” to the preferred alternative for the group

Presumptive Remedies





- Established Presumptive Remedies
 - » VOCs in Soil
 - » CERCLA Municipal Landfills
 - » Wood Treatment Facilities

Presumptive Remedies (cont)

- Applicability

- » Assemble Core Team
- » Develop Site Conceptual Model
- » Identify threats posed by site (site problems)
- » Identify conditions/characteristics warranting action
- » Identify conditions/characteristics addressed by presumptive remedy
- » If the conditions/characteristics are compatible, then apply the presumptive remedy (compatibility determination is an iterative process that may be supported by limited data collection)
- » Implementation opportunities (see handout)

Implementation Opportunities for Presumptive Remedies

Implementation Point	Project Phase*	Benefit of Implementation
	Scoping/Planning	Focus project planning (e.g. what data to collect to support selection of presumptive remedy) on use and implementation of the presumptive remedy(ies).
	Investigation	Focus data collection on confirming use (e.g. similar characteristics) and design of presumptive remedy. Confirm need for action and/or pathways to be addressed by the response action.
	Alternative Evaluation	Range of alternatives considered is focused on the presumptive remedy and no action. A range of process options (e.g. technical variations within the same response action) for the presumptive remedy may be evaluated if necessary for remedy selection. Rely on national administrative record to support selection of the presumptive remedy.
	Decision Document	Presumptive remedy may be added even if not in site specific alternative evaluation document (e.g. FS, EE/CA) as a result of comments on the evaluation documents or new information. The selection is substantiated by designation as a presumptive remedy.
	Design	Focused early by identification of presumptive remedy and is supported by the focused data collection. Use of a proven technology aids in the design by using previous experience.
	Action	Because design is better supported (e.g. focused data collection and use of previous experience), remedial action is expected to be completed with less performance uncertainty and in a shorter time frame. Additionally, action is reached earlier due to an expedited process.

* The presumptive remedy can be applied to CERCLA removal or remedial actions as well as RCRA Corrective Actions

Presumptive Remedies (cont)

- Example DOE Application

- » Brookhaven National Laboratory

- Landfill containing low level radionuclides, lab waste and debris, equipment, animal wastes, PPE, construction/demolition debris.
 - Site conditions/characteristics were determined to be compatible with the CERCLA municipal landfill presumptive remedy, therefore the landfill contents were contained in-place using a surface barrier.

Contingent Removal Actions

- Establishes a standardized, pre-approved response strategy for a defined site condition thus reducing paperwork/documentation delays and expediting response.
- This approach has not been applied to date.
- Applicable to expected, recurrent site problems where an acceptable response action and strategy can be agreed to up front, facilitating response immediately after discovery.

Recommendation

- Assemble Core Team of Decision Makers
- Identify Site Problems to be addressed
- Incorporate the use of Generic Approaches into site strategy if there is a potential for use
- DOE-HQ is available to provide support as needed

OPTION 1

WP Process	WP Steam Condensate	WP Chemical Waste	WP Tank Waste
X	X	X	X
X		X	X
X	X		X
X			X

- 9± WP; one for each group
- No need for 200 Technical document
- Analogous site/subgroups developed in WP (identified as boxes and X's above)

OPTION 2 (Maybe 2 WPs for each High and Low)

200 East WP		200 West WP
<div> <div>Process Waste Analogous Site</div> <div>Chemical Waste Analogous Site</div> <div>Steam Condensation Analogous Site</div> <div>--</div> <div>--</div> <div>--</div> </div>	± 9 groups	<div> <div>Process Waste X</div> <div>Chemical Waste X</div> <div>Steam Condensation X</div> <div>--</div> <div>--</div> </div>

*Analogous Groups/Rep Sites are selected in a technical document first - WP may reference from east to west or vice versa.

*Burial Grounds may be separate WP.

OPTION 3
(May be 2 - 1 high - 1 low)

1 WP

- Covers characterization of rep sites for all groups in 200 Area (200-East, West, 200-N, and IUs)
- Rep sites are preselected in technical document
- Focus package written as regulatory means to reach decision document for sites within analogous groups.

OPTION 4

1 - Purex

1 - B Plant - (scavenged waste - ponds, ditches)

1 - U Plant - Uranium

1 - T Plant - Supernatant

1 - Z Plant - Organics and Pu

1 - Redox

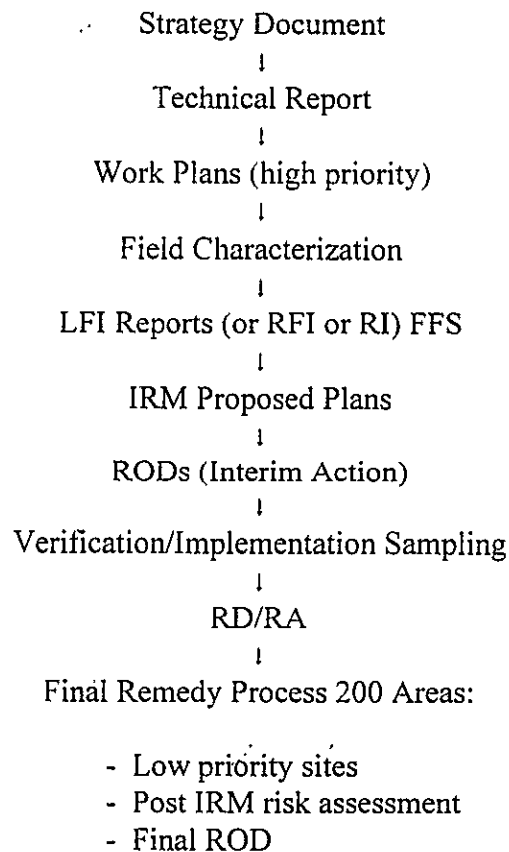
OPTION 2 (Details)

- 3 work plans (high priority?) for representative waste sites
 - Ecology, 200 East (including IU-6, IU-1, IU-2)
 - EPA, 200 West (including IU-5, 200N)
 - Ecology, Burial Grounds (218 waste sites, NRDWL, IU-3, SWL, etc.)
- 200 Area Technical document
 - Decide groups (analogous)
 - Criteria for assigning sites to analogous groups (i.e., cut off levels identifying where site should be placed such as organics, U)
 - Selection of rep analogous sites
- Work Plan
 - Intro - discusses 200 Area strategy, references technical document, identifies focus package concept, etc.
 - Background and setting - lists all sites in analogous groups, lists rep sites, reference the AAMS
 - Initial evaluation of known and suspected contamination (reference AAMS)
 - Conceptual model for each group/subgroup (refine AAMS . . . in WP)
 - Identify ARARS (reference AAMS)
 - Preliminary RAO's and alternatives (reference AAMS)
 - Work Plan-Rationale
 - SAP for rep sites (specifics in DOWs)
 - DQO
 - QAPP
 - DOWs - how many, scope of DOWs
 - To be approved by reg agency (coordination is strongly recommended between regulators)
 - QRA/(Risk Assessment?)
 - Treatability tests
 - Appendices - H&S Plan, Data Management Plan, Project Plan
- LFI (RI) Report
 - WP or DOW as basis (1 or more)
- FFS (FS)
 - WP or DOW as basis (1 or more)

- Focus Package

- For sites not characterized but analogous to rep sites that have been characterized
- Cost analysis
- References LFI/FFS for rep sites provides rationale why they are similar
- Post ROD sampling and analysis strategy to verify meets conceptual model and for implementation (DOWs, in parallel with or ahead of RD/RA)
- DOWs at a late date (RD/RA)

FLOW CHART



U PLANT AGGREGATE AREA (Process)

<u>ORG.</u>	<u>UNKNOWN ORG.</u>	<u>U</u>	<u>Pu</u>	<u>OTHERS</u>
		U-1		U-3
		U-2		
		U-5		
		U-6		

S PLANT AGGREGATE AREA (Process)

S-13		S-1	
S-14		S-2	
S-15			
			T-6
			T-19
			T-25

Z PLANT AGGREGATE AREA (Underground/Process)

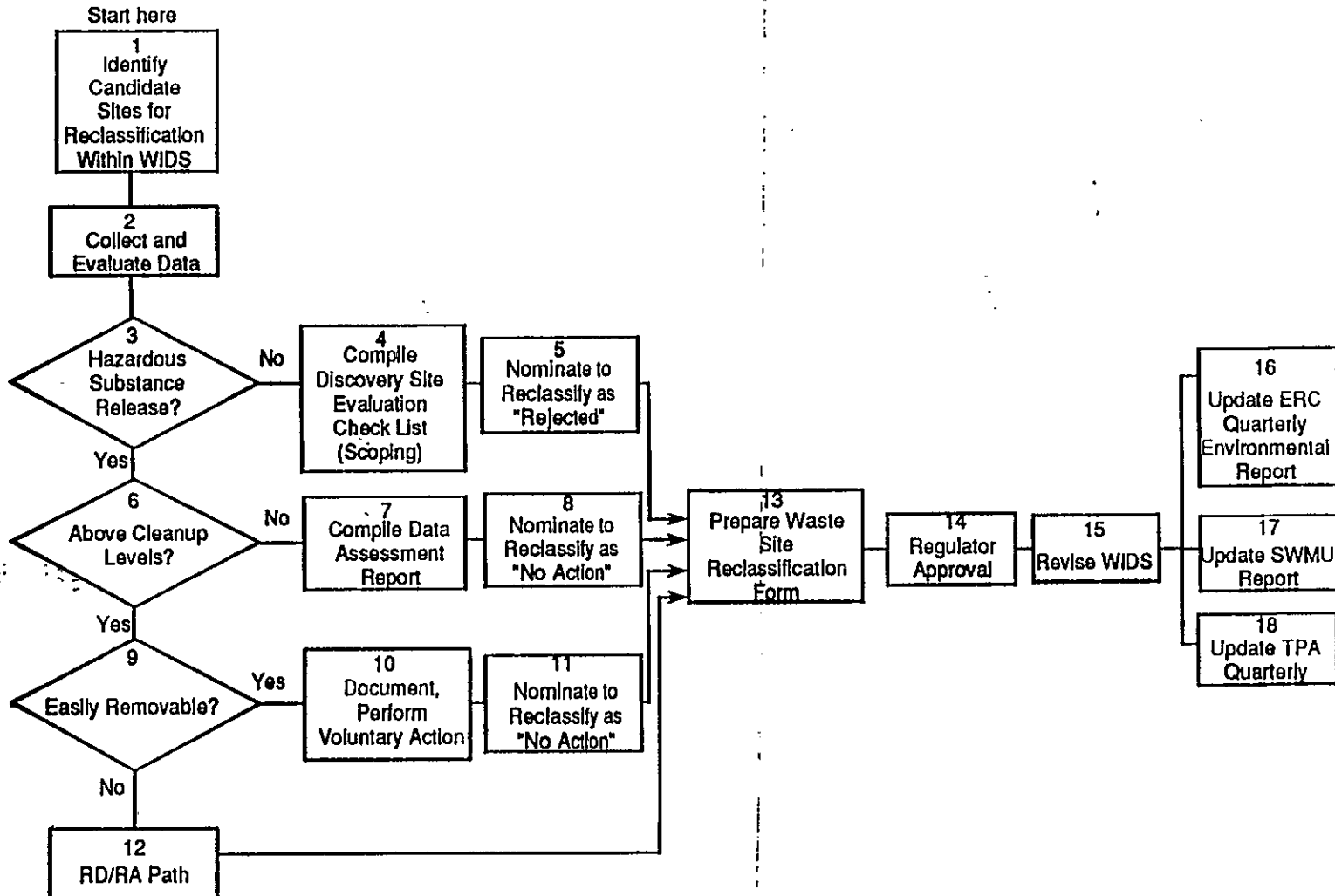
<u>KNOWN ORG.</u>	<u>UNKNOWN ORG.</u>	<u>Pu</u>
xZ-1	•Z-3	xZ-1, xZ-1A
xZ-1A	•Z-5	xZ-2
xZ-2	Z-6	•Z-3
Z-18	•Z-7	•Z-5
xZ-9	•Z-8	•Z-7
	•Z-12	•Z-8
	Z-13	xZ-9
<u>U - DECON</u>	Z-14	•Z-10
	•Z-16	•Z-12
	Z-4	•Z-16
	•Z-10	•Z-17
	•Z-17	
	231-Z (1-51)	

x =

• =

Bold - Waste sites from the miscellaneous waste category.

WASTE SITE RECLASSIFICATION



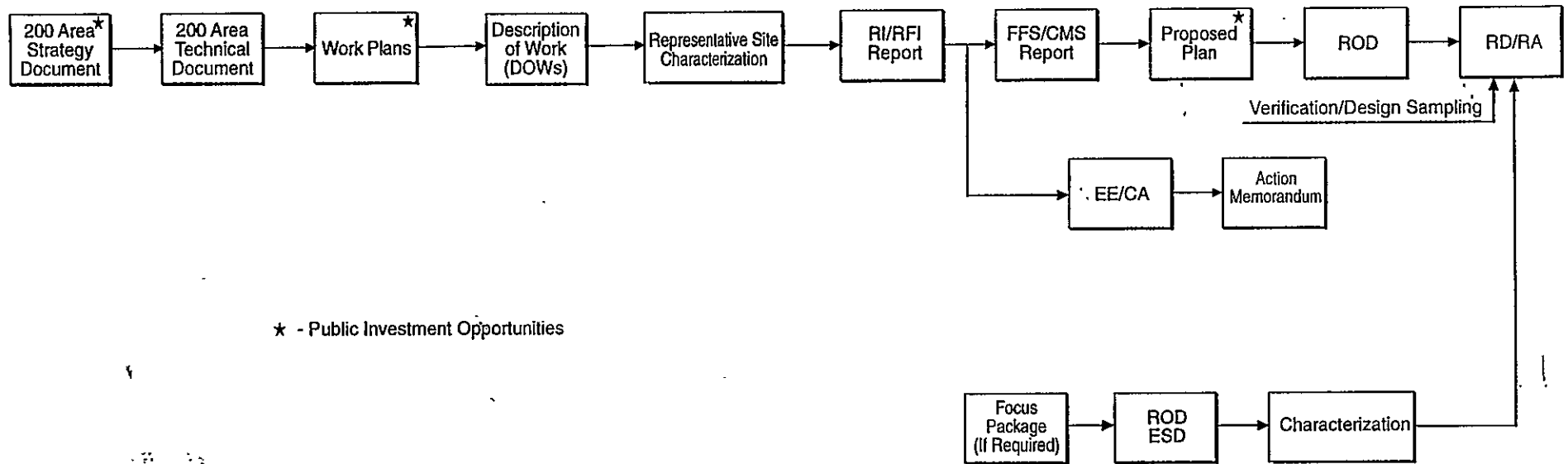
WASTE SITE RECLASSIFICATION

#	CHART NAME	CHART ACTION
2.	Collect and Evaluate Data	Compile all existing data and, if necessary collect new data (DQO as appropriate).
3.	Hazardous Substance Release?	Has there been a release (or potential release) of CERCLA hazardous substances or RCRA hazardous constituents at the waste site?
4.	Compile Discovery Site Evaluation Check List (Scoping)	Reassess the site scoping process and determine whether or not the site should have been placed into the "accepted" category of WIDS in the first place. Use current WIDS site evaluation procedure and checklist to document this scoping process.
5.	Above Cleanup Levels?	Is the source of the release (or potential release) no longer present at the site? If so, is there any remaining contaminated media that would exceed anticipated, conservative cleanup levels, such as those specified in an approved decision document for similar sites?
6.	Compile Assessment Report	Compile data to support determination that if the site were to be addressed through the full CERCLA or RCRA process it would result in a "no action" decision.
7.	Easily Removable?	Could the source of the release (or potential release) be easily removed from the waste site and would any remaining contaminated media below anticipated conservative cleanup levels such as those specified in approved decision document for similar sites?
8.	Document, Perform Voluntary Action	Conduct a voluntary action to remove the source and then compile data to support a determination that if the site were to be addressed through the full CERCLA or RCRA process it would result in a "no further action" decision.
9	RD/RA Path	Continue along the full CERCLA or RCRA Past Practice pathway to receive a ROD. Conduct RD/RA activities to either remediate the site in accordance with the terms of the ROD or obtain characterization data during remedial design that indicates the site meets applicable cleanup levels without remediation.

Comparison of RCRA corrective action and CERCLA remedial action

	RCRA	CERCLA
Documents	RFI > CMS > Permit Mod > Statement of Basis	RI (LFI) > FS (FFS) > Proposed Plan > ROD EE/CA > Action Memorandum
Substances covered	Non-radioactive hazardous waste and/or hazardous constituents under RCRA	All radioactive and nonradioactive hazardous substances, pollutants, or contaminants
Cleanup criteria	MTCA for non-rad constituents	- MTCA for non-rad constituents (via ARAR) - 15 mrem/yr for rad (EPA, NRC, DOH proposed rules as TBC)
Applicable requirements	- Must comply with all applicable requirements (administrative <i>and</i> substantive, must obtain permits) - Waivers if regulation has built in waiver provision	- Must comply with all applicable <i>and</i> relevant and appropriate requirements (substantive only, permits not required) - Waivers if regulation has built in waiver provision <i>or</i> for any of 6 other reasons (interim action, technical impracticability)
Remedy selection	- Emphasizes technical effectiveness and compliance with applicable regulations - Includes public participation process, but not an explicit evaluation criteria - Allows no action if cleanup impracticable or will not reduce risk substantially	- Balances nine criteria, including overall effectiveness, compliance with ARARs, short- and long-term effectiveness, implementability, reduction of toxicity, mobility, and volume, cost, state and public acceptance - By law, encourages innovative technologies - Allows no action if risk is low and cleanup is too costly
Use of ERDF	- Allowed for RCRA corrective action waste <i>only if</i> a CERCLA decision document is issued (ROD, Action Memorandum); can have both a permit mod and a CERCLA decision document	- Allowed for CERCLA waste
Post-cleanup		Review every 5 years required if contaminants above cleanup levels left on site (e.g., capping)
NEPA	Currently, must do separate NEPA documentation unless approval received from DOE HQ	NEPA values may be incorporated into CERCLA document; no separate NEPA

200 Area Implementation Flowchart



200 Areas Strategy Meeting Grid

Participants	3/20/96 (mtg)	3/21/96 (mtg)	3/22/96 (mtg)	4/4,5,8/96 (char. grouping)	4/9/96 (tour)	4/10/96 (mtg)	4/18/96	5/8/96 (mtg)		
Bryan Foley	X	X	X	X	X	X	X	X		
Paul Beaver	X	X	X	X	X	X	X	X		
Dennis Faulk		X								
Joan Bartz	X	X	X			X	X	X		
Suzanne Dahl	X	X	X	X	X	X	X	X		
Jack Donnelly	X	X	X		X	X	X	X		
Norm Hepner								X		
Alisa Huckaby	X	X	X							
Moses Jaraysi	X	X	X							
Dave Lundstrom	X	X	X		X			X		
Shri Mohan	X				X	X	X	X		
Laura Russell	X	X			X	X		X		
Joan Woolard	X	X	X		X	X	X	X		
Greg Mitchem	X	X	X		X	X	X	X		
Greg Eidam	X	X	X		X	X				
Michael Galgoul	X	X	X		X	X	X	X		

200 Areas Source Operable Unit Strategy Action Item List - (05/08/96)

No.	Performer	Description	Date Assigned	Due Date	Date Completed	Description of Closure
Tour Action Items						
1	ERC	Was there a Sr-90 release to Gable Mt Pond?	04/09/96	Hold	Hold	
2	ERC	Was there an overflow from Gable Mt Pond to West Lake?	04/09/96	Hold	Hold	
3	ERC	What is the physical status of the Hexone Tanks and what monitoring is being done?	04/09/96	Hold	Hold	
4	ERC	What is the well control for contaminants from the BC cribs, and what are the trends?	04/09/96	Hold	Hold	
5	ERC	Is there groundwater contamination associated with 200 N?	04/09/96	Hold	Hold	
6	ERC	What is currently going to B Pond, and why are there rad signs around B and C lobe?	04/09/96	05/17/96		
7	ERC	Why does a surface stabilized area exist SE of OU3 inside the fence?	04/09/96	05/17/96		
Tour Follow-on Work						
1	ERC	Is there 200 N groundwater contamination?	04/10/96	Hold	Hold	
2	ERC	Ditches versus trenches (and cribs; label open, closed, ???).	04/10/96	Hold	Hold	

200 Areas Source Operable Unit Strategy Action Item List - (05/08/96)

No.	Performer	Description	Date Assigned	Due Date	Date Completed	Description of Closure
3	ERC	Are any septic tile fields around Z Plant active?	04/10/96	04/10/96	04/10/96	Yes, there are active septic fields around Z-Plant.
4		Waste-site groupings need field review to see how they fit (reality check).	04/10/96	Hold	Hold	Incorporate as part of technical document or work plan work.
5	DOE	B/C controlled area "risk" with windy season coming up and other surface contamination issues in the 200 Areas.	04/10/96	TBD		
Characterization Action Items						
1	ERC	How is first cycle supernatant related to high-level waste definitions? (ERC)	04/08/96	05/08/96		
2	ERC	Where did the muck removed from 361 tanks go? (ERC)	04/08/96	05/08/96		
3	ERC	Is A-39 in the tank farm? (ERC)	04/08/96	05/08/96		
4	ERC	Where is A-43 and A-44? (ERC)	04/08/96	05/08/96		
5	ERC	Is there a new 200 E Powerhouse Pond? (ERC)	04/08/96	05/08/96		
6	ERC	Need additional inventory information from the miscellaneous waste group sites to subcategorize.	04/08/96	Hold	Hold	Hold pending technical document determination.

200 Areas Source Operable Unit Strategy Action Item List - (05/08/96)

No.	Performer	Description	Date Assigned	Due Date	Date Completed	Description of Closure
7	ERC	QA check on the waste-site type designations used in the grouping process (e.g., process condensate). Check with Stenner et al. (ERC)	04/08/96	Hold	Hold	Hold pending technical document determination.
8	Suzanne/Paul	Capture grouping philosophy - Narrative from subteam.	04/08/96	04/25/96	04/25/96	
General Action Items						
1	Tri-Parties	Public involvement before finalizing the 200 Areas Strategy will occur.	03/22/96	TBD		Establish date after working draft issued.
2	All	Any items in the workshop sourcebook that the team feels are a candidate for inclusion in the strategy should be highlighted for future consideration (have ready for field trip).	03/22/96	05/30/96		Evaluate during review of working draft.
3	All	Field trip, April 9, 1996 - RL to coordinate with Paul Beaver and Jack Donnelly. Anyone who can brief on a particular waste site/aggregate area will inform their agency's contact person. Bring lunch and sourcebook.	03/22/96	04/09/96	04/09/96	
4	All	Next meeting - April 10, 1996.	03/22/96	04/10/96	04/10/96	
5	Karl Fecht	Calculations for buffering capacity of soils (in liquid waste study).	03/21/96	03/22/96	03/22/96	Karl Fecht handed out material on 03/22/96.

200 Areas Source Operable Unit Strategy Action Item List - (05/08/96)

No.	Performer	Description	Date Assigned	Due Date	Date Completed	Description of Closure
6	All	Collect public values.	03/22/96	04/10/96	04/10/96	It was decided that public values would not be included in the Strategy Document.
7	All	Read AAMSR before field trip.	03/22/96	04/09/96	04/09/96	
8	ERC	Strategy document describe "linkage" of final grouping criteria statements.	03/22/96	05/17/96		To be addressed in strategy document.
9	ERC	Provide adequate explanation of flowchart in strategy document.	03/22/96	05/17/96		To be addressed in strategy document.
10	ERC	Prepare participants grid for all the meetings.	03/22/96	04/18/96	04/18/96	
11	ERC	Get the meeting minutes from this meeting out early.	03/22/96	04/01/96	04/01/96	
12	All	Each team member to review lists generated in Section 8.0 to come up with additional brainstorming ideas on implementation and prioritization. These should be sent to Joan Woolard before the meeting.	03/22/96	04/10/96	04/10/96	Brainstorming completed in 04/10/96 meeting.
13	ERC	Submit revised annotated outline before meeting.	03/22/96	04/03/96	04/03/96	Outline submitted and revised in 04/10/96 meeting.
14	All	Evaluate need for an analytical strategy. Separate document or included in strategy.	05/02/96	05/15/96		Part of level of characterization subteam.

200 Areas Source Operable Unit Strategy Action Item List - (05/08/96)

No.	Performer	Description	Date Assigned	Due Date	Date Completed	Description of Closure
15	ERC	Check to see what new information is available since the AAMRS (geophysical logging).	05/02/96			
16	ERC	Provide a copy of the analytical strategy.	05/02/96	05/08/96	05/08/96	
17	ERC	Pros/cons of work plan options (strategy recommendation versus "old way").	05/02/96			
18	ERC	Norm Hepner added to distribution list.	05/08/96	05/15/96	05/15/96	
19	ERC	Create project schedule showing work through 09/96.	05/08/96	05/22/96		
20	ERC	Applicability of landfill presumptive remedy to DOE burial grounds.	05/08/96	05/22/96		
21	ERC	Copy of phased response guidance.	05/08/96	05/15/96	05/15/96	
22	ERC/Ecology	Moses/Linda talk on RCRA issues.	05/08/96	05/15/96		

200 Areas Source Operable Unit Strategy Parking Lot Items - (05/08/96)

No.	Description	Date Assigned	Date Closed	Status	Description of Closure
1	100 mrem/yr basis - April 10th?	03/22/96		Linked with Item 3.	Try for next meeting after Item 3 discussion.
2	Presumptive remedies.	03/22/96	05/08/96		Consensus on integration with strategy document received.
3	Land use (industrial standard?) - April 10th? <ul style="list-style-type: none"> Does characterization drive land use or does land use drive characterization? Does characterization drive remedial decisions or does remedial decision drive characterization? 	03/22/96		Elevated to decision-makers.	Meeting held 05/09/96 with Dave Lundstrom, Paul Beaver, Bryan Foley, and Doug Sherwood. Proposed language for an assumption was discussed. Revised assumption will be provided to all participants for further consideration. Issue still open.
4	Groundwater versus source correlations?	03/22/96			Prioritization issue. Hold pending priority discussion.
5	Consider waste site deletion candidates. (Do we know enough about some sites now to drop from further consideration?)	03/22/96	05/08/96		Waste site reclassification approach accepted.
6	Put remedial alternatives section in strategy document?	03/22/96	05/08/96		Outline addresses this approved.
7	Possible addition to assumptions list (from Suzanne Dahl). <ul style="list-style-type: none"> Strategy actions must be considered against sitewide cumulative risk. 	03/22/96			Item still open.
8	Waste disposal for the 200 Areas? - April 10th.	03/22/96			Included in Item 3 above.

200 Areas Source Operable Unit Strategy Parking Lot Items - (05/08/96)

No.	Description	Date Assigned	Date Closed	Status	Description of Closure
9	Scope of the technical document. How much data evaluation is needed and what belongs in the technical document versus the work plans. Geophysical logs and groundwater data, conceptual models.	05/03/96			Assign to subteam and present to full team.
10	Interim versus final action.	05/03/96	05/08/96		Deleted.
11	Level of risk assessment and characterization.	05/03/96			Assign to subteam and present to full team.
12	Include schedule in strategy document.	05/13/96			

Distribution
Unit Managers' Meeting: 200 Areas Remedial Action
200 Areas Remedial Action Strategy Work Shop
May 8, 1996

Bryan Foley	DOE-RL (H0-12)
Jim Hanson	DOE-RL (H0-12)
Heather Trumble	DOE-RL (H0-12)
Donna Wanek	DOE-RL (H0-12)
Dennis Faulk	EPA (B5-01)
Paul Beaver	EPA (B5-01)
Joan Bartz	WDOE (Kennewick)
Suzanne Dahl	WDOE (Kennewick)
Norm Hepner	WDOE (Kennewick)
Alisa Huckaby	WDOE (Kennewick)
Moses Jaraysi	WDOE (Kennewick)
Dave Lundstrom	WDOE (Kennewick)
Shri Mohan	WDOE (Kennewick)
Laura Russell	WDOE (Kennewick)
Jack Donnelly	WDOE (Kennewick)
Vern Dronen	ERC (H0-17)
Karl Fecht	ERC (H0-02)
Linda Mihalik	ERC (H9-12)
Greg Mitchem (3)	ERC (H0-17)
Michael Galgoul	ERC (H9-12)
Joan Woolard	ERC (H0-17)
Administrative Record	(H0-09)

Please inform Gary Gesell (372-9067) of BHI
of deletions or additions to the distribution list.